PLAY METER

UPDATE EDITION

Vol. 5, No. 18 October 1, 1979

Ramtek bows out

Video competition getting too tough

In an effort to eliminate the low profit aspect of its business, Ramtek has decided to exit the field of electronic games production. Citing the increased level of competition in the arcade/video game business over recent years, Ramtek's Mel McEwan, general manager of the recreational products division of the company, said: "We decided not to make the bigger commitment it would take to compete in today's video game market."

Ramtek entered the video field in 1972, on the heels of Nolan Bushnell's *Pong*. At that time they produced *Volley*, a game designed as a refinement of Bushnell's big hit. The company's participation in the video game industry was seen then as a natural extension of its central effort, the construction of computer graphic display systems.

Essentially, the groundwork for the departure from the games industry was laid in November, 1978, when Ramtek became a public corporation. Stockholders were quick to realize that although the recreational division had provided a cash flow boost to Ramtek in its early days, the market had grown so competitive that the current Ramtek effort left it as somewhat of an also-ran in the field. So they have influenced the company to convert its total effort to display systems, which have shown success of late through their use in conjunction with contemporary X-ray equipment.

The recreational division of Ramtek employed thirty workers, approximately one-tenth of employees of the entire company. Of those thirty workers, five have already been transferred to other Ramtek positions, but the twenty-five who remain within the recreational products division will continue to produce the company's current effort *Boom Ball*, at least in the near furture.

Ramtek's first three years in the business, from 1972 to 1975, were its most successful, but it is interesting that as it makes its departure from the field of games manufacturing Ramtek has a hit on its hands with *Boom Ball*.

Ramtek has named Electronic Amusement Service of San Francisco to assume the handling of parts and service for existing Ramtek games. E.A.S. is a six year old firm which boasts of total industry respectability. Under the able direction of Bill Bolton, E.A.S. repairs and tests boards for every major manufacturer. They have also from time to time been requisitioned to do production testing for protype models.

World Pool-- an American flop

Whatever happened to the World Pool Tournament?

The Billiard Congress of America—to pool what the PGA is to golf—apparently was able to squash the questionable contest before it got any hold at all on American operators or players.

It was an ambitious scheme of Michael Farley's, pitting winners from the U.S., Canada, England, and Australia against each other, that would lead to a championship battle in Hong Kong to decide the finest 8-Ball player in the world.

But Farley's plans snagged when the B.C.A. questioned his financial maneuverings. Farley intended to take investors at $11,000 apiece into his scheme as regional tournament directors. Perhaps one of the basic reasons for the failure of Farley's attempts was that it was never quite clear how the investor might amass a sizeable return on his investment.

"Besides," says Bob Goodwin of the B.C.A., "we could never find out exactly what he was doing, or going to do, with the money involved."

No American investors, apparently, were ever ensnared by Farley, and so no one here has much to complain about, but several promoters in London reportedly were burned, some for up to more than $100,000, sponsoring an event that never reached its conclusion there. (PLAY METER, October 15, 1978, p.15-16).

The American finals were scheduled to have been played in Las Vegas in mid-summer 1979, but the world will have to await a more successful organizer.

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In no uncertain terms

Operators are responding to the votes cast by their representatives and senators on the Ernest F. Hollings amendment. A vote against the amendment was a vote to include the jukebox operators within the realm of the authority of the Copyright Royalty Tribunal. (PLAY METER published a complete voting scorecard on pages 40-43 of its July 15, 1979 issue, listing each congressman and how he voted.)

An operator in Crowley, Louisiana wrote to his congressman, Republican Representative David Treen:

"When you voted for the Copyright Royalty Tribunal it was a vote against jukebox operators.

"It would please me tremendously if you would please refund the $100 contribution made to your campaign. You no longer have my support."

The same operator fired off this memo to Democratic Representative John Breaux:

"I have always voted for you in the past, but you may be assured that you will never get another vote from me."

Both Breaux and Treen are active politicians who are considered to be on their way up the political ladder. Treen, in fact, is currently running for governor of Louisiana.

Cowboys convene quietly

In Montana, the state legislature meets but once every two years, and since this is the in-between year, political rhetoric lies dormant in the beautiful mountainous countrysides there.

In the midst of this rugged tranquility, the Montana Coin Machine Operators Association held its annual summer convention. The site was Jorgenson's Holiday Motel in Helena, in the latter days of July.

Although business was not to be discussed until Saturday, Friday found members already gathered to enjoy leisurely hours at Frontier Town, a unique old fort whittled out of the side of the mountain that overlooks Helena.

AMOA President Wayne Hesch was on hand Saturday to bring the Montana membership up to date on the copyright issue, and Fred Granger contributed spirited words on the history of the local chapter.

Montana chose John Stocksdale of D&R Music and Vending in Boseman to be the association's candidate for the AMOA board of directors, and proceeded to elect two local officers. Joe Callant of B&B Distributing will preside over the organization for the coming year and Dick Carey of Capital Music Inc., Helena will serve as vice president.

Since the convention, confirmation has been received for Montana's choice for its 1980 summer convention at the Outlaw Inn in Kalispell.

Calendar

October 11-13
West Virginia Music & Vending Association, Ramada Inn, South Charleston

October 14
Deutsche Wurlitzer Distributors Meeting, Hotel Croatia, Dubrovnik, Yugoslavia

October 25-28
NAMA national convention, McCormick Place, Chicago

November 9-11
AMOA international exposition, Conrad Hilton, Chicago

January 18-20
Oregon Amusement & Music Operators Association, Valley River Inn, Eugene

January 18-20
Music Operators of Minnesota, Minneapolis

March 20-22
Amusement Operators Expo., Fairmont Hotel, New Orleans

June 5-7
Music Operators of Texas, El Paso

No great changes foreseen for use of microprocessors in games

By Zac Oliver

The metal spheroid, freely spinning, rolls and compresses a rubber band. The rubber band stretches as pushed by the ball's kinetic energy, and moves a switch blade. The blade bends and its contact point touches the one in the facing switch blade.

Typical pinball action is repeated over and over simultaneously in many places around the world. Making no considerations for human behavior and tribal customs, one cannot keep from looking at games as by-products of the society we are in and a representation of a technological influence on our lives.

Technologies have been applied to our games at a slower rate in relation to technology's own development. Only in recent years has electronics been applied to the game industry. Since its introduction, the electronic pinball microprocessor has changed the game, creating systems more reliable, expandable, flexible, cheaper, compact, and complex.

However, electronics still shares the link to the human world through other technologies. Microprocessor development is slow and it is quite certain that no major change will occur in the next two years, although larger systems, with bigger bite size, are likely to be employed in future games. Again, the obstacles will be found in the interface between player and machine. Even the all-time winner, *Space Invaders*, suffers from this problem. Those control buttons are definitely not spill proof.

Electro-mechanic and mechanic components, units, and systems play a substantial part in a game. In the electro-mechanic game, control circuitry is the usual main failure. A set of contact somewhere fails resulting in a service call. The breakdown of mechanical parts is equally high and seems to be, proportionately, the only area in the electronic games subject to higher failure.

Indeed every manufacturer has made an effort to reduce down time due to control circuitry failures and it is noticeable in the improvements. There is also an attempt to solve the problems in the mechanical and electro-mechanical sections of the game, although not so successfully. Almost every new game brings a new solution to field problems. However, with change in old designs, new designs and variations of old mechanisms are also introduced. These mechanisms do not always correspond to the play demand and sometimes it is really apparent why not!

Of course, in any line of equipment, especially mechanically oriented, failures will occur. However, rubber mounting posts on pin games and player controls on video games do fall apart too often. The game cabinets are not designed for abuse. Thousands of dollars are lost every year due to the simplicity of break-ins. The front door is another area where vandalism is constant and often successful. Leg and leg levelers get damaged frequently. (Evidently, generalizations like the ones above do not apply to every system of different manufacturers.)

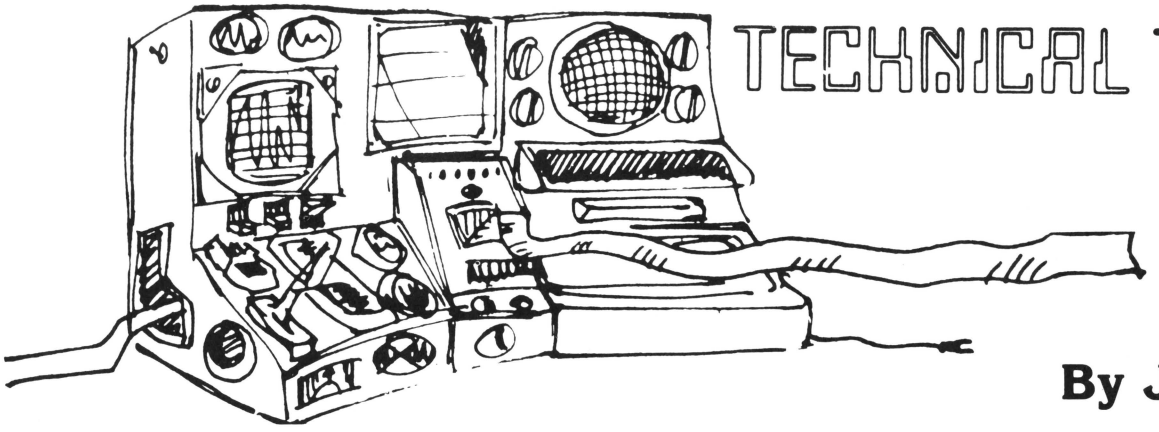
If you know your location, try your best to find the game that is most suitable there, and by all means protect it! Lock bars in the front door, padlocks, reinforced back doors, back cabinet and buttons, alarm systems: you name it! Whatever time and money you spend in such addition will pay in the long run.

Service in the field has tried to follow the steps to understand and adapt to new generations of games. Since Atari's *Pong*, some seven years, the individual concern for upgrading knowledge has become coincidental with the development of the equipment.

The electronic pinball created the change. The servicemen will have to study to catch up with the industry. Education is available but scattered. Classes are too heterogeneous and brief. The most complex part of the games, the logic, does not fail frequently on street repair level and often the seminar student forgets part of what he has learned. Maybe a sequence of seminars or a better selection in technical level would be more productive. Notwithstanding, the coin machine industry is growing.

No one can really foresee what is going to happen in the next few years in the coin machine industry, as microprocessors are yet to be fully used to their potentiality. Playfield conceptualization might change drastically if the player and other inventive minds are ready for it. Also, new development in display systems will be created. Holography may be one answer to a less electro-mechanical pinball.

Opening a new game carries the excitement of opening a toy, and lately manufacturers have been supplying the market with excellent games. These games are creating new types of players (portions of the market we did not have before). The trends are open!



TECHNICAL TOPICS

By Joe Sillup

Remember the playfield

Solid State Pinball

Now that pinball machines are almost totally solid state, the mechanic in the game room has little to do in the way of maintaining the machines. Most problems with these games can be solved by repair or replacement of the various printed circuit boards located inside the game.

However, the most important thing to fix first in a solid state pingame is the playfield. Unlike video games, which contain very little other than a computer, TV monitor, and several controls, pingames have coils and lamps and switches under the playfield which operate as a system to make the game. A problem in any of these areas will affect the operation of the computer circuitry in the game, and possibly result in circuitry damage. We will discuss some of the problems commonly encountered on playfields that can lead one to think he has "bad boards" when in reality the playfield itself is at fault.

First, and most important, *never* work on the playfield of a solid state game with the power on. A momentary short between a coil terminal and a switch will send 40V of solenoid voltage down a 5V logic line to the CPU board, very likely causing circuitry damage to the CPU. The same holds true for lamp sockets and switches. So if you have to change a coil or a light bulb, or adjust a switch blade, always turn the game off first.

Improper scoring is not always due to a bad CPU board. For example, many games have target banks located close to pop bumpers. The switches under the target bank close when the targets drop, and are supposed to stay closed until the bank resets. But if the switch contacts are dirty or the switch blade tension is improper, the force of the pop bumpers operating will vibrate the switches, opening and closing the contacts momentarily. This causes the CPU to score the value of the drop target instead of the pop bumper value. Also, if there are star rollovers located close to pop bumpers, the same thing may happen. The force of the pop bumper operating may cause the switch under the star rollover to vibrate closed, thereby scoring an improper value. The solution to both of those problems is proper switch blade tension adjustment.

Bally and Stern machines use .05MFD capacitors across stand-up target, star rollover, and pop bumper switches. The purpose of these capacitors is to allow the CPU board to "see" a closed switch faster than would be possible without the presence of the capacitor. Due to the extreme vibrations involved in these areas of the playfield, the leads of the capacitors occasionally break. This results in a "no score" situation if the switch with the broken capacitor is struck fast and hard by the ball. The center target on Bally playfields is famous for this problem. Replacement of the broken capacitor with a disc-type capacitor with thicker leads will usually solve the breakage problem. Capacitors of this type are readily available at electronics shops such as Radio Shack.

Playfield cleaner is an inadvertant enemy of solid state pin games. If the cleaner is applied too liberally, it will run down between the blades of the stand-up switches on the playfield, and soak into the bakelite spaces between the switch blades. This can cause the CPU to "see" either a shorted switch or a switch that is opening and closing rapidly. The result is either no score or too much score from that switch. If this happens you will have to disassemble the swtichstack and clean the spacers, which is a tedious job. So be careful when you clean the playfield.

Broken wires can also be a cause of improper scoring. If a lamp wire comes into contact with a switch terminal, it will cause the CPU to "freak out" and score everything that it can possibly score. The same holds true for a coil wire that may be shorting to the coil frame. When that particular coil is activated, the solenoid voltage may pass through the frame into the switch blade, again causing the CPU to "freak out" and score improperly or shut down.

To solve these types of problems,

you will have to see exactly what occurs on the playfield when the game goes crazy, then thoroughly examine that area of the playfield for a possible problem.

Gottlieb games occasionally have wiring harnesses that get rubbed through by target bank reset arms or flipper stands. This will damage the CPU board if solenoid voltage is passed into a switch line, so if you have repeated board failures in Gottlieb games you will have to closely inspect the wiring harness under the playfield for an area where the wires may have been rubbed through. If you find such an area, repair and tape the wires, then reposition the harness with a cable clamp so that it cannot be damaged again.

Finally, burned coils must be changed before repair or replacement of the solenoid driver board. It is important to remember that every coil in a solid state game must have a diode across it. The purpose of this diode is to prevent a voltage "spike" from damaging the coil's driver transistor when it is turned on. If this diode breaks off or opens, the transistor will short and the coil will burn. So be sure the replacement coil you install has a diode on it, and observe the polarity of the connections. The solenoid voltage common wire must always be connected to the "band" or cathode end of the diode. If the connections are reversed, the driver transistor will be damaged.

The same holds true for lamp sockets. If a socket is shorted or dirty inside, it will either damage its lamp driver (SCR or transistor) or not operate. So check out the condition of the socket before repair or replacement of the lamp driver board.

Hopefully these hints will lead to less downtime on your solid state pin games. Remember, you must repair the playfield before you change any boards. And the playfield can make you think you have "bad boards" when in reality you have a simple problem under the playfield. Pinball playfields have been around for fifty years, and they are still subject to the same problems that they've always been subject to, even though the motors and relays are gone now. A simple playfield problem can cause expensive board damage, so be careful. Checking out the playfield just may help you avoid a needless and sometimes expensive trip to your distributor's electronics department.

—Reprinted courtesy of Star-Tech Journal, Merchantville, New Jersey 08109.

Exidy ups service concerns

Exidy President H.R. Kaufman has announced a warranty reserve program and an incentive board program.

"A basic tenet of these programs is to provide better and more efficient in-warranty, minimum charge service to the distributor, and, at the same time, offer timely support to the operator," announced Kaufman as he issued a statement at initiation of the programs.

The warranty reserve program is effected in the form of a credit to a reserve account set up for purchasers of games from Exidy. Each *Star Fire* buy is credited with forty dollars warranty credit; each *Crash* purchase is credited twenty dollars of warranty credit; each new Exidy game produced will be assigned an appropriate warranty credit.

An Exidy customer who has a warranty account will be able to use the funds credited therein to buy Exidy parts or merchandise, or to use Exidy labor at a rate of $37.50 per hour.

Credit accounts are limited to $4,000, no cash rebates are allowed, and credits are not retroactive.

As a product of Exidy's new incentive board program, a complete set of logic boards is being dispersed, at no charge, at the time five games have been shipped to a customer. Another set of boards will accompany each purchase of 25 games.

The new Exidy programs are now in effect and have been designed to give cash credit to the distributor in order to help him give better service to the operator in the name of Exidy.

Exidy recently moved its headquarters to 390 Java Drive, Moffit Industrial Park, Sunnyvale, CA 94086. The new phone number is 408-734-9410. Exidy also has secured a new Telex number, 357-499.

Douty retains title

Philadelphian Jesse Douty utilized a quick pace and an accurate forehand shot to retain his national Air-Table-Hockey championship.

The event, held at the University of Houston, August 4 and 5, was brought to an exciting finish as Douty recovered from a so-so first day of competition that had left him in fifth place going into the finals.

Douty started the finals competition with a hard fought victory over his home town rival, Joe Campbell, who had entered the last day as the top seed, and finished off his day's work by handily disposing of Texan Phil Arnold.

Arnold placed second in the competition and Campbell wound up in third place. For his victory, Douty received a championship trophy and a cash award of $180.

The competition was marked by the absence of Colorado's Mark Robbins, who recently captured the Texas Superflea State Tourney. Robbins, apparently, is on the injured reserve list.

Sega reports gains

The growth in acceptance of coin-operated video games in Japan and the addition of Gremlin Industries and Esco Trading Company to its corporate structure have enabled Sega Enterprises to issue an annual report for fiscal 1979 that ostentates dramatic revenue increases for the company.

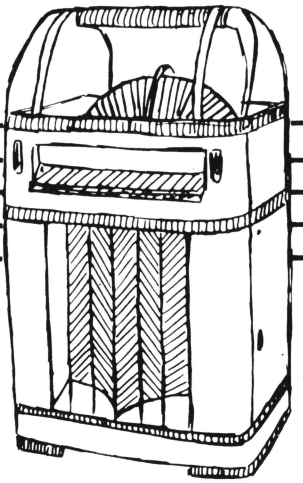
Net earnings for the year ending June 30, 1979 reached a record $12.5 million, representing a more than 600 percent increase over last year's earnings of $1.9 million. Total revenues for the year were $101 million, compared with $37.2 million the year before.

The glowing report, issued by Chairman of the Board and President David Rosen, comes on the heels of a 3-for-1 stock split for holders of common shares as of June 22.

Sega, which manufactures, distributes, and operates amusement games in the United States and Japan, is an 87 percent owned subsidiary of Gulf + Western Industries, Inc.

MUSIC PROGRAMMING

By Pat Matthews
WQUE New Orleans



The days dwindle down

It certainly has been some of those days. The entire country has certainly had its share of lousy weather, and recently, in the southern states, we've had to sweat out not only the heat, but also the threat of hurricanes.

If anything sticks out more than any other item in the music world, it has to be the rise of "new wave" music, or rock n' roll stripped to its bare roots and speeded up to 49 rpm, as I like to think of it. We've had our share of this new phenomenon to review this summer and I must admit I've definitely surprised myself by going out on limbs to hail the music. The music has justified itself, however, through its numerable successes.

WHERE ARE YOU—Eugene Record—Warner Brothers WBS 49060

From its majestic and jazzy opening, you know there's got to be more. And how! The record by Mr. Record suddenly comes alive into a brandishing brass, skyscraping string mid-tempo dance tune. "Where Are You" straddles the disco/R&B fence closer than any tune in recent memory. The beat makes it disco; the gutsy vocals keep the soul flowing. Disco and R&B charts will be ablaze with this 8 out of 10 Eugene record.

HELLO, HELLO, HELLO—New England—Infinity INF 50,021

Produced by Paul Stanley of Kiss, this is the second single release from this very talented group's debut LP. It's rumored they're in the studio working on their second and that effort certainly is awaited anxiously by this writer. New England blends the best in driving, acoustic, and esoteric rock all into one. Then add the Beatle-ish vocals and harmonies, and what have you got? A very good record! 7 out of 10 at least. This should be the record for this group to get rolling.

GET A MOVE ON—Eddie Money—Columbia 1-11064

Eddie is back! This time it's with a tune from the cult flick *Americathon*. It's a hard rocker complete with Linda McCartney "la-las" (not her, but sounds like the lovely lady). Money, who hasn't made very much since he ate spaghetti out of my plate at Pascal's Manale Restaurant earlier this year, still has that female attracting sound to his voice, with *all* the right inflections. And with all the right exposure, this one will be big. 8 out of 10.

HALF THE WAY—Crystal Gayle—Columbia 1-11087

The opening bars remind me of the Box Tops old smash "Cry Like A Baby," but that's where the similarity ends. Crystal's voice comes through as strong as ever in this beautiful ballad that just oozes with sex appeal. Needless to say it's a strong male grabbing tune with Crystal bemoaning the unhappiness of settling for second best and "half a love." Having definite crossover possibilities, Ms. Gayle has a sure-fire country hit for herself and her new record company. I give it a 9 out of 10—Country and an 8 out of 10—Pop, if it crosses over.

RAMONA—Wet Willie—Epic 8-50760

I have to admit that upon hearing the *Which One Is Willie* LP for the first time, I silently picked this tune as the single. I was wrong and as you probably know, "Weekend" went on to be a very successful record for the prides of Dixie and a comeback record of sorts for them. Well now my silent wish has finally come true and it's here! "Ramona" is a very up tempo, Van Morrison type rocker with very characteristic vocals and tight, bright instrumentation. There's also an excellent acoustic guitar and sax ride in the middle. Come to think of it, this tune sounds a lot like old Allman Brothers, but certainly maintains the "original" sound of Wet Willie. Keep on smilin'! 7 out of 10.

PLEASE DON'T LEAVE—Lauren Wood—Warner Brothers WBS 49043

Warner Brothers has had tremendous success in breaking new artists this year (Randy Van Warmer, Nicolette Larson, Rickie Lee Jones, Roger Voudouris, *et al*), and here's another possibility. First off, it's produced by Ted Tempelman of Doobie Brothers' fame with background vocals by Michael McDonald, a Doobie Brother. This debut single from Lauren's soon-to-be-released LP has a distinctive R&B flavor and a Doobie Brothers' arrangement. This record is just full of potential. It has all the right ingredients. 8 out of 10 or better.

ALL THE GOLD IN CALIFORNIA—Larry Gatlin & The Gatlin Brothers Band—Columbia 1-11066

California has all the money. At least that's what Larry Gatlin would like us all to believe in this tongue-in-cheek tune about the Golden State. The song itself has a gospel feel and that's the key. From the opening *a cappella* verse, throughout the tune, you get this sense of a religious experience in the making. The chorus is the hook: "All the gold in California is in a bank in Beverly Hills in somebody else's name." Get the picture? It's a positive Country smash with very little to offer in the lyric department, so no one should have any trouble in memorizing the words in just one listen. 10 out of 10 country.

News Briefs

.....Progress is slow as the A. M. O. A. seeks to reach its goal of $250,000 to fight the location list regulation of the Copyright Royalty Tribunal. To date, the A. M. O. A. reports, only 240 operators and a handful of distributors and manufacturers have combined to contribute a mere $72,000. The A. M. O. A.'s case is now before the U. S. Court of Appeals, and the organization is preparing for the January, 1980 review of the present eight dollar royalty.....

.....Apparently, no pinball endurance record is safe these days. While the ink was still drying on a certificate presented by Williams Electronics to Sonny Ciavatta in Riverside, California, Donald Dilligan was edging past the 228 hour record at Khyber Pass Pub in Philadelphia, Pennsylvania. Dilligan performed on a Flash that was set for free play by Eastern Music Systems.....

.....That new city law in Providence, Rhode Island that limits businessmen with more than two pinball machines to heavy commercial areas is being called too restrictive by Raymond Dettore, a member of the Bureau of Licenses.

According to the Providence Journal-Bulletin, the new law was designed to give the bureau the power to shut down arcades that have large numbers of machines and attract youngsters who might, in turn, become a nuisance to the area. But when the bureau decided recently not to issue game machine licenses to seven businesses in Providence, Dettore stepped forward to say that the scope of the law is "unreasonable." His solution, however, is neither very creative nor encouraging. He simply wants to up the definition of amusement centers to those with six or more games.....

.....According to the Miami News, a local epidemic in parking meter break-ins has led to a design change in the meters that will cost the city an estimated $540,000. The new meters come from the Duncan Meter Company, cost $83 each, and are constructed like little bank safes. Officials contend that the epidemic spread from a "TV news show on the first break-ins last year that gave the kids the idea."....

Classified

WANTED: Backglass for Gottlieb Target Pool. OKOBOJI AMUSEMENT CO., R6580, Spirit Lake, IA 51360. Tel. 712/332-7220.

FOR SALE: Chicago Coin O'Boy playfield-1939. Any reasonable offer and it's yours. WANTED: Williams Vagabound. ROB BERK, 704 Perkinswood N.E., Warren, OH 44483. Tel. 216/369-1192, 372-4652.

FOR SALE: Gottlieb Guys & Dolls, June 1953. Chicago Coin Champion, June 1949. Call TOM KEIL, 704/373-1211.

WANT TO BUY: Any old jukebox, pinball etc. advertisements. Send list to RAYMOND KINDLAR, 5231 N. Oskview, Chicago, IL 60656.

FOR SALE: Playboy $1095; Vulcan $495; Hang Glider $425; Checkmate $275; Breakout $495; Bow & Arrow $325; Avalanche $585. Games like new shopped. ACE VENDING. Tel. 502/875-1983.

MECHANICS WANTED: 1 Bingo, 1 Solid State, Top salary and fringe benefits. 3 years experience. Send resume to AMUSEMENT CORP., P.O. Box 21138, Chatanooga, TN 37421.

OLD PINBALL BACKGLASSES—Some Bally Bingo backglasses, list upon request. Also old wooden rail pinballs, old arcade units, etc. AUTO-MATIC AMUSEMENT CO. LTD., 6065 Cunard St., Halifax, Nova Scotia Canada B3K 1E6. Tel. 902/425-3300. Attn. B.A. Boudreau.

REWARD! REWARD! REWARD! $2000 for leads resulting in the purchase of slot machines, antique jukeboxes, vending parts, any old machines. Confidential cash. JUKEBOX JOHNNY, Rt. 1, Ixonia, WA 53036. Tel. 414/567-3836, 414/567-4714.

PINBALL TOURNAMENTS: If you have a location with a minimum of 15 pinballs, please write us. PINBALL ASSOCIATION OF AMERICA, INC., 30 W. Washington, Suite 1432, Chicago, IL 60602.

D.R.A. PRICE GUIDE offers complete up to date information on price values of used equipment. For free sample ½ booklet write—DISTRIBUTORS RESEARCH, 262 NW 29th St., Miami, FLA 33127.

FOR THE BEST IN USED FLIPPERS, VIDEO GAMES and arcade equipment at the cheapest prices see our regular ad in the classified section of PLAY METER MAGAZINE. NEW ORLEANS NOVELTY COMPANY, 1055 Dryades St., New Orleans, LA Tel. 504/529-7321.

PINBALL TOURNAMENT KITS $25, Pinball Wizard News, $10 per year. NATIONAL PINBALL WIZARD ASSOCIATION, 200 U.S. 1, Linden, NJ.

SCHOOL FOR GAMES & MUSIC one to three week courses. Phonos, videos, electro-mech and logic flippers. By schematics! CAL'S COIN COLLEGE, P.O. Box 810, Nicoma Park, OK 73066. Tel. 405/769-5343.

WANT TO PURCHASE: Pre-war machines, arcades, slots, etc. Also, antique collector machines, any condition and parts. JACKPOT AMUSEMENTS, 14216 Clark Street, Riverdale, IL 60627. Tel. 312/849-4041.

FOR SALE: Wurlitzers 78 RPM. One P-12-616-700 AWD, 2 1100s, $1900 for all five. Some parts missing. JUKE BOX CITY, 50 W. Main, Mesa, AZ 85201. Tel. 602/833-7168.

WANTED: Wallbox and stepper for operation on Wurlitzer 3310. LISKE ENTERTAINMENT SERVICE, 1010 Cleveland Dr., Kinston, NC 28501. Tel. 919/522-4940.

AM1 PARTS—Complete keyboards for MM-1 & MM-2 with buttons and trim $45 each-NEW. Also, new AMPS for model JAN & JAO $45. STROHPAUL, INC., 7986 South Division, Grand Rapids, MI 49508. Tel. 616/455-2950.

FOR SALE: American 12' Rebound Shuffle Board with lights, pingate, and scoring unit. Almost new and in excellent condition. $995. MODERN SPECIALTY CO., Madison, WI. Tel. 608/256-0216.

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